CERAMIC TILES IN RELIGIOUS ARCHITECTURE IN EGYPT AND TURKEY IN THE OTTOMAN ERA STUDY OF ADAPTATION AND THE DIFFERENCE BETWEEN THEM

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Abstract

Architecture influenced by the Ottoman era architectural methods used in Constantinople and art architectural Seljuk, and after opening the Ottoman Levant 922 AH / 1516 AD mixed with the architectural traditions of the Mamluk era with the Ottoman influences religious Valamarh became a campus square Dome mono neck interspersed with windows luminescent cover, it has been used ceramic tiles with Decorative themes plant key element in clothing the interior walls and some interfaces parts, was dominated by blue tones and green have developed porcelain works in Ottoman times dramatically, and the first renewal done by the Ottomans was the use of dark red color in the porcelain, as well as the use of ceramic tiles, a new type so that it is under paint decree white and blue, and so the Ottoman ceramic moved into a new phase, we see in the Suleymaniye mosque and Rustem Pasha mosque in Istanbul and the most beautiful ceramic tiles in the palace of Topkapi Sarayi in Sultan Ahmet mosque (blue mosque), where the walls are covered with ceramic slabs dominated by blue, they took care of the Ottomans decorated the walls of their buildings ceramic slabs which included the decoration on the different types of flowers that builds up to 276 type that culture ottoman and thought that has spread throughout the Ottoman Empire and that Egypt was under this provision starting from 1517 m - 1805 m and then the upper 1805 1952 - Dynasty AD, we find a lot harmonization and differences in terms of the use of ceramic tiles in both Egypt and Turkey in many religious buildings, marked by the trappings of ceramic tiles in this period, the diversity of the decorative designs that adorn one building where the second half of the tenth century period (16 m) and the first half of the century atheist ten AH (17 m) represent a golden age for the production of ceramic tiles Ottoman they are of the nature of a special taste we see in these religious buildings did not care any previous era Beauty walls with large quantities of fine ceramics tiles that we see in every country under the Ottoman era, especially in the newborn for Egypt which won the attention of many religious buildings studies will be for ceramic tiles in some architectural and religious models in Egypt and Turkey during the Ottoman explaining aspects of harmonization and the difference that the nature of the place have a significant impact on the preference of colors from the other in each country and the diversity and multiplicity of different designs and how much ceramic tiles used in the cladding walls that differed in both of them.

Research Issue: Under the study of alignment and the difference in the arts and architecture between Egypt and Turkey, many of the mural works that reflect one another and identity environment where emerged and others do not reflect the identity place, this has become a critical study of the surrounding environment of the artist, which should not be in isolation in order to emphasize The nature of the place, everyone everywhere
civilized background and the nature distinguishes it from others.

Research Hypothesis: Search aims to consolidate the role of the art of mural painting in the technical wizards in religious buildings

Keywords: Architecture, Porcelain, Ottoman Empire

1. INTRODUCTION

Islamic architecture is one of the broadest spreading arts, as the architectural styles in the vast Islamic empire has not the same architectural style within in the long centuries in which Islamic art flourished. They differ in the building materials themselves and in the types of columns and capitals, decades, minarets and domes and in the types of geometric and floral motifs and linear trappings as well as in materials which cover walls such as gypsum and Ceramic tiles with multiple designs and colors.

2. RESEARCH ISSUE

In light of studying the alignment and the difference in the arts and architecture between Egypt and Turkey, many of the mural works that reflect one another as one of them is shown in the environment and identity of the place, while the other one is not shown in the identity of the place because of the cultural integrity and exchange between the two states. Therefore, it is important to study the environment surrounding the artist, from which he should not be away in order to stress the identity of the place as each place has cultural background distinguishing it from others.

3. RESEARCH METHODOLOGY

Thesis follows the theoretical methodology and comparative analysis.

4. RESEARCH IMPORTANCE

Monitoring and analysis of some religious buildings in Egypt and Turkey, pointing out the concerns of the wall artist to decorate walls with Ceramic tiles in the architecture and aspects of harmonization and difference among them.

5. RESEARCH HYPOTHESIS

Thesis aims to establish the role of wall art in architectural treatments which led to harmonization in design and implementation, in order to produce buildings with coherent character in some internal and external elements where effects of the surrounding environment appear.

6. RESEARCH AXIOMS

Each environment has significant and special character with rich resources. Although, there are various effects of cultures entangled together producing a new vision in some elements and different in another in the same time. Such new vision can be noticed in Islamic arts and architecture within the Ottoman era.

Hypotheses:
Wall artist utilized the data of each environment and how to use them in a new way sometimes.

Research Limitations:
The study of Ceramic tiles in some religious buildings between Egypt and Turkey in The Ottoman era.

Research Terminologies:
- Porcelain: is made of non-organic, non-metallic, solid and brittle materials (after being placed in fire), very flexible material in its natural status, producing many things. Color of Ceramic tiles is usually white and it can be mixed with different and colored materials.
- Architecture: is the art and science of design, planning and construction of buildings and facilities to cover the physical and moral needs of human using different materials and methods of construction.
- Ottoman Empire: or the Ottoman Empire is the Islamic empire founded by Osman Ben Ertugrul I, and continued for nearly 600 years, namely from July 27th 1299 till October 29th 1923 AD (1)
Contents of thesis:
- Architecture.
- Architecture in Ottoman era.
- Ceramic tiles in religious architecture in the Ottoman era.
- Examples of some religious buildings in Egypt and Turkey.

Findings and recommendations:

Architecture:
It represents the essence of cultural identity and the creative and financial level of man harmonized with the requirements of man and traditions of his environment. Islamic arts can be distinguished, as there is a general unit collecting them as any building constructed in any era of the Islamic civilization eras can be recognized.

There are two perspectives to recognize the nature of Islamic architecture:

The first perspective:
Architectural, historical and emotional perspective depending on three axes in the definition of the Islamic civilization.

1. Formal axis:
It reduces the Islamic architecture in its most popular forms such as arches, domes, internal courtyards, divans and oriells, as it gives to those shapes, an Islamic significance based on an Islamic thought with a consolidated roots, manifestations and objectives within a joint religious and social climate.

2. Spiritual Axis:
It is the spiritual axis of Sufism which believes that the Islamic architectural history has direct implications on the theories of Sufism.

3. Environmental axis:
It illustrates that the popular and urban Islamic creativities, are significantly linked to their environment and creative reactions with such environment. These three axes are crossed together giving the most common definition of Islamic architecture nowadays.

The second perspective:
It depends on historical and geographical dimensions. History of Islamic architecture extends between the seventh century and the beginning of the nineteenth century, while the geographical dimension stresses that Islamic architecture is the entire buildings and facilities that are full of the cities of the Islamic world and its regions, including those that once formed a part of it and then grabbed by other civilizations such as Andalus and Sicily and those that were recently joined it such as Turkey.

Architecture in the Ottoman era:
Islamic architecture was influenced by the architectural methods used in Constantinople and Seljuk architecture. After opening Levant by the Ottoman in 922 AH / 1516 AD, architectural traditions of Mamluk era with the Ottoman influences, as in religious architecture, Harem “the sacred inviolable place” has become in square shape covered by mono neck dome interspersed with lighting windows. Plant Ceramic tiles have been used as a key element in coating the interior walls and some parts of the facades above doors and windows. Blue and green have dominated them.

Ottoman mosques:
There are huge number of mosques Turkey, which back to the Ottoman era, especially in Istanbul and Edirne. They are one of the most beautiful Islamic facilities with an international reputation.

7. CERAMIC SLABS IN RELIGIOUS ARCHITECTURE IN THE OTTOMAN ERA
And the first renewal of the Ottomans was done by the use of dark red in Ceramic tiles, as well as the use of new kind of Ceramic tiles so that below paint there will be drawing in white and blue.

It was found in the Suleymaniye Mosque and Rustem Pasha Mosque located in Istanbul and in the Sultan
Ahmed Mosque (Blue Mosque) where the walls are coated with slabs of Ceramic tiles dominated by blue\(^5\). Most designs consist of natural flowers along with pear trees and cherry buds. Spaces among flowers are filled by big green leaves look like curved daggers, however in the last half of the sixteenth century natural flowers shapes prevailed in all Turkish works of decoration arts\(^6\).

We can divide the Ceramic tiles in the Century (10 AH -16 AD) into two distinct periods in terms of decorative style. The first period includes the first half of such century while the second period includes the second half of such century.

The first period is characterized as being considered a continuation of the method used in the slabs century (9 H -15 AD), which is the emergence of writing decorations interspersed with rich bifurcations in dark blue, yellow and white. Botanical motifs are carried out on a blue background.

The originated Ottoman Ceramic tiles started to emerge in the second half of the century (10 H -16 AD) in the city of Iznik, during this period many different Ceramic tiles motifs and colors were produced\(^7\), and during this period, many mosques, schools, shrines, palaces and kiosks were built.

The Ottomans were interested in the decoration of the walls of their buildings with Ceramic tiles whose decorations included different types of various flowers which are up to 276 types. therefore, we find such culture of the Ottoman spread throughout the Ottoman State under which Egypt starting from 1517 AD-1805AD and then the era of Alawiyya Family (1805 AD - 1952 AD).

We find much harmonization and the difference in terms of the use of Ceramic tiles in both Egypt and Turkey in many different buildings and generally observed in the decoration of Ceramic tiles in this period of diversity, richness, and variation of decorative techniques not only among the not only among the trappings of Ceramic tiles covering the various buildings, but also in the Ceramic tiles adorning each individual building as every style has its significant artistic advantages and characteristics.

The second half of the century (10 H -16 AD) and the first half of the century (11 H -17 AD) represents the golden age of the Othman Ceramic tiles production as such industry reached the height of its prosperity, especially its main city of Iznik.

But at the end of this period, the second half of the century (11 H -17 AD), we find that the Othman Ceramic tiles industry lacked the variation in motifs and colors, where the use of the narrow decorative tapes that included a botanical drawings of flowers, limbs and leaves drawn in a stylized manner, and the Turkish red color was replaced by the pinky red color, and the green and light blue has been used each in dim way, though the usage dark blue has remained. Drawings in such period were not good and lacked the brightness, colors and outlines fonts became mixed and unclear. For the period of the century (12 H -18 AD), the Ceramic tiles industry deteriorated at the beginning of this century in its main city of Iznik, but in a year (1117 H-1724AD) such industry has been revived again as the skilled potters have been transferred from Iznik city to takafar saray factories in Istanbul.

For the slabs of Kutahya(12 H -18 AD) which distinguished by botanical decoration, it is difficult to put them in one method or within one group, where we found Ceramic tiles include modified botanical patterns and others includes botanical patterns close to the nature, and tend to use white close to blue and red color that lost its brightness and become close to the color of beatitude and pale yellow, while the other was characterized by a set of ceramic slabs with good white ingredients.

No preceding era paid attention to the decoration of most walls with such large areas with the fascinating Ceramic tiles that we see in all countries within the Ottoman era, especially when we talk about Egypt, which won this attention in most of the various religious buildings as we see convenience and variation in terms of the areas of covered walls in different buildings in Egypt, and the various designs and how they are processed and the different methods of coloring and study of botanical element in its various types of leaves, flowers, writing decorations and others in Egypt and Turkey\(^8\).

8. EXAMPLES OF SOME OF THE RELIGIOUS BUILDINGS IN EGYPT AND TURKEY

Egypt have been affected in the period of the Othman era, by many methods of such era, and specially the Ceramic tiles covering the walls of religious buildings, putting into consideration that such Ceramic tiles could not be found during any previous era in Egypt on the religious buildings, so it was optional for this era to be the concern of my technical study.
Therefore, the thesis should compare those buildings remaining from such era with those remaining in Turkey, although the remaining buildings show us the fabulousness of them including the Ceramic tiles with the various designs and botanical elements, flowers and the various coloring methods. Those buildings has not gained the due attention, that's why we stress on a number of buildings which still maintaining those Ceramic tiles.

Alti Barmaq Mosque in El Darb El Ahmar – Cairo – built on (1123 H – 1719 AD) \(^9\)

![Figure 1](image1.png)

The Ceramic tiles covering the Mihrab (Figure 1) has been brought from the Turkish Iznik City, but during the time period in which such industry was deteriorated as performance became inaccurate in drawing details and coloring next to incoherent drawings which does not give us the sense of continuity as the case in the past, but the artist tried to achieve such sense even if in a simple way. We can find the out Ceramic tiles affixed on the Mihrab are gathered together giving a complete design.

The red color for which the Turkish city of Iznik is famous, and we cannot find any other Ceramic tiles in the most. The artist tried to print the hallmark of that era using little coverage of walls with Ceramic tiles as the case was in Turkey at the same time.

Deterioration of performance level in buildings was found in either Egypt or Turkey, but the Turkish mosques in the Ottoman era had covered walls with large quantities of Ceramic tiles because:

- Turkey is the center of the Ottoman Empire.
- Turkey is famous for manufacturing Ceramic tiles.
- Ceramic tiles slabs found in Egypt are brought from Turkey.

Aq Sankar Al Nasery Mosque or Ibrahim Agha Mosque (the Blue Mosque) – built on (747H-748 H/1346 AD – 1347 AD)

![Figure 2](image2.png)  ![Figure 3](image3.png)
Rebuilt in (1062 H -1652 AD), it is called the blue mosque because of the various Ceramic tiles covering the dome’s wall. We find that Ceramic tiles covering walls as artist used here a coloring style with blue with its degrees and the green with white. Seeing the place is distinguished by this style as one color which is the blue. Artist has not used the red color for which the Turkish city of Iznik is famous.

This brings us back to the period which characterized the Turkish city of Iznik, which is coloring white and blue style, which simulates the name of Sultan Ahmed Mosque (Blue Mosque) built (1018 H -1020 H/1609 AD -1616 AD) in Istanbul (Figure 6 & 7), as the interior walls of the mosque are characterized by the huge numbers and various designs of ceramic slabs as well as the coloring methods even if the coloring method with blue color in its degrees and white color was prevailing.

Featuring paintings of Ceramic tiles of views including Cypress (Figure 8) and numerous designs with precise style in drawing details and sensing the continuation of seeing the ceramic slabs drawings (Figure 9).

For Aq Sankar Al Nasery Mosque, it is considered one of the mosques in which the biggest number of ceramic slabs in huge quantities is existing in comparison with the other mosques in Egypt. We can find walls coverages with big number of ceramic slabs with white, blue with its degrees and green coloring style. Artist used the method of gathering Ceramic tiles together in order to form the shapes shown in (Figure 5) as
we can see Cypress drawn in a method identical with those drawn in the Turkish mosques such as Sultan Ahmed Mosque (Figure 8).

Artist whether in Sultan Ahmed Mosque in Istanbul or in Aq Sankar Al Nasery Mosque in Cairo, has covered walls by big number of Ceramic tiles dominated by blue color. Designs are corresponding together. Those are the convenience elements in both mosques, but the number of Ceramic tiles in Sultan Ahmed Mosque is much more than the number of Ceramic tiles in Aq Sankar Al Nasery Mosque because of the expansion of the construction area of the mosque. The red color is used in Sultan Ahmed Mosque but in Aq Sankar Mosque, this color has not been used. This is the differentiation element between the two mosques. Ceramic tiles in Aq Sankar Al Nasery Mosque are big sized 24cm*24cm, but in Sultan Ahmed Mosque, they were smaller in size and more accurate (Figures 8 & 10).

Mostafa Mirza Mosque in Bolak, Cairo – Built on (1110 H – 1698 AD)

Ceramic tiles in this mosque are considered one of the largest volume of Ceramic tiles used in decorating walls of the Othman buildings in Cairo. Volume of the big size Ceramic tiles. Colors with the same coloring white, blue with its degrees and green style, are characterized by simplicity and symmetry in drawing the ceramic elements and in this style the green color is most used but performance became simpler than before.

Abu El Dahab Mosque in Al Azhar, Cairo – built in (1187H-1703 AD) (Figure 12), we find repetition in the style of coloring in blue and white but with smaller size in this mosque. The style is very simple, lacks the distinguishing characteristics of Ceramic tiles in its previous era.

We find here the pale yellow, and we cannot see the degrees of blue as before. Also, Mihrab of Gonblat Mosque – built in (1212 H-1791 AD) (Figure 13 & 14)
History of manufacturing it is backed to the 17th century AD and brought from previous buildings and reused.

Many facilities affiliated to mosques were found in that Era such as Sabil and Kuttab

Sabil and Kuttab of Abd Al-Rahman Katkhuda built on (1157 H-1744 AD) (Figure 15) whose walls are covered by various Ceramic tiles with blue color and its degrees and white coloring style, and the emergence of Qur’anic writings (Figure 16) such as Solaymania Mosque (Figure 17 & 18) and others. (16)
Set of Ceramic tiles were found inside forming the shape in which the Kaaba (Figure 19). This reminds us with Rustom Pasha Mosque in Istanbul (Figure 20) Those slabs were brought from Kutahya city in Turkey\(^{(1)}\).

(Figure 19)  (Figure 20)

Most of mosques built during the Othman Era in Egypt, in which there is Ceramic tiles are dominated by the style of blue and white coloring, and in the other mosques we can see the green and little yellow coloring style. For the red coloring style in which the Turkish City Iznik is distinguished, it was simply used in some of those religious buildings due to the desert nature of Egypt, even if the seeing of colors in the environment surrounding the artist such as the red color but artist used the colors of the sky and greed objects which distinguish the nature of Egypt. Also, he used the yellow color, which is the desert color surrounding all Egyptian cities. For the Ceramic tiles covering the walls of mosques during the Othman Era in Turkey, the coloring styles varied in each individual mosque as we can see two styles of coloring, one of them is blue with its degrees, white and green coloring style and in the other style we can see the red color for which the Iznik City is famous. This due to the nature of Turkey where green objects, flowers with their various colors, and the love of the Turkish Artist to the flowers, is reflected. We can see him showing that in his various drawings and designs in all religious buildings distinguishing the Othman Era.

The number of Ceramic tiles found in buildings in Egypt in less than those Ceramic tiles found in Turkey as those Ceramic tiles covering interior walls are brought from various cities starting from Iznik City then Kutahya City then Takafot saray in Turkey. Artist tried to simulate those big famous mosques distinguishing the architecture in the Othman Era in Turkey by covering walls with those Ceramic tiles; Of course, they cannot be typically like them because Turkey is the center of the Othman Caliphate in addition to the vastness of mosques’ sizes in Turkey in comparison with those mosques in Egypt. It worth to mention that Istanbul city after the Othman conquest for it and the entry of Islam when the significant attention was paid to the spread, showing and superiority of Islamic religion. This enhanced the importance of religious architecture and the increase of motifs in many materials which can survive for long away from Byzantine style that’s why they were creative in using such Ceramic tiles during such period of time which distinguishing this Era. For sure, all countries under the umbrella of the Othman governance were affected by those styles during this Era.

But in Egypt, the Othman Era was preceded by other various Islamic Eras, in which we can see mosques with large spaces, but free from Ceramic tiles. By the commencement of the Othman Era, large number of mosques with the Othman style was built.

Accordingly, it can be concluded that the Islamic school, even if the era is different, is a complete technical school which produced types of all arts including without limitation architecture, construction and applied arts. It also contributed and still contributing in building the human civilization.

Findings and recommendations of thesis:

1. Wall imaging should not be isolated from the surrounding environment.
2. Paying attention to studying the civilization history in order to recognize to which extend the convenience and differentiation among the world civilization reached.
3. Wall imaging has an important role in originating the beautification values of each building.
REFERENCE LIST

(1) http://ar.wikipedia.org/wiki/%D8%AE%D8%B2%D9%81
(2) www.arabna.info/vb/showthread.php
(3) http://islamstory.com/ar/is/am-history.
(4) Yousef Farhat (1993), Greater historical mosques , Dar El shmal ,Tripols, p121.
(5) www.turkpress.com/node/11752
(6) www.cedarwingsmagazine.com
(8) Rabia Hamed Khalifa (2001): Islamic Art in the Ottoman era, Zahra El Shrak Library, Cairo, p.31-50.
(9) http://civilizationlovers.wordpress.com